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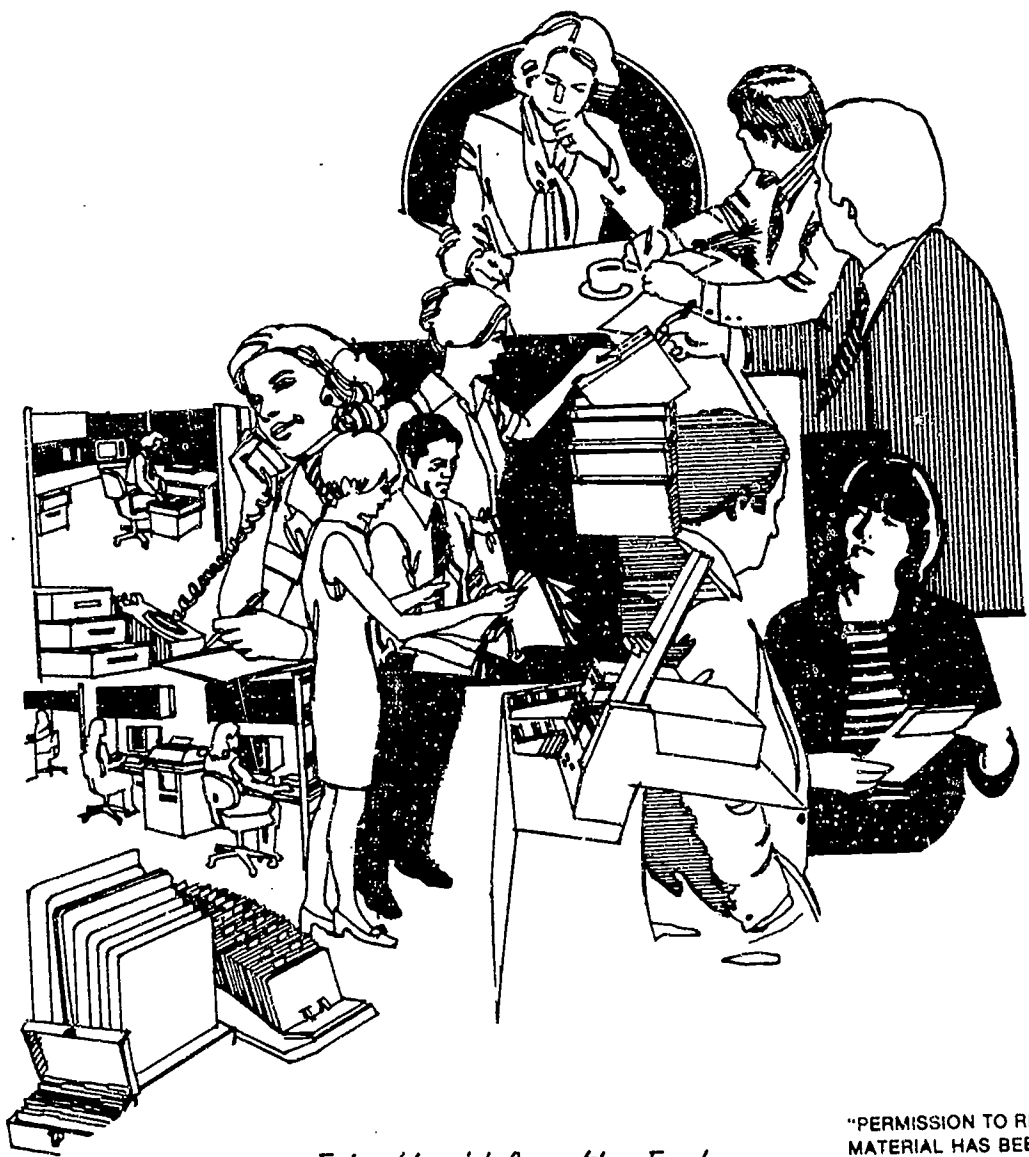
ABSTRACT

An important goal of the Educational Information Exchange (EIE) of Alberta Education is to provide leadership in promoting school student record automation. This document presents a mechanism for the review, evaluation, and recommendation of school-based student records software for the EIE. The report provides an overview of the initiative to automate and begins with a description of the preparations taken prior to the beginning of the review process. The main topics covered in this section are the request for information from software vendors; formation of the working committee for the review process; and an outline of the evaluation strategy. The next section examines the software evaluation process. It consists of the following stages: short software demonstrations; half-day software demonstrations; visits to school sites; invitation to offer; and negotiations and recommendations. The fourth section provides general overviews of the top eight software packages evaluated by the working committee. The final section provides a summary of the report and concluding remarks. Nine appendixes include sample letters, a description of functional criteria for evaluating software, and a list of vendors. (JLB)

School Based Student Records Package Evaluation Report



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NOTE:

It should be noted that the views and recommendations expressed in this report are those of the *Working Committee for the Evaluation of School Based Student Records Software Packages.*

Schools and school jurisdictions considering the implementation of any of the products evaluated by the working committee should note that student records software is frequently enhanced. As such, the reviews presented in the findings section of this report may not necessarily apply to newer versions of software released after the submission deadline established by the working committee.

Schools interested in automating their student records are encouraged to obtain the *Guide to Student Records Automation* from the Educational Information Exchange.

Acknowledgments

Alberta Education acknowledges, with appreciation, the valuable contributions of the external members of the *Working Committee for the Evaluation of School Based Student Records Software Packages*.

There were many other people who contributed to this initiative and who have helped make it a success. Sincere thanks is extended to them all.

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Appendices

1. Introduction

An important goal of the Educational Information Exchange (EIE) has been to provide leadership in promoting school and jurisdiction student record automation. The ultimate purpose of automated student records systems is to help school staff better meet the needs of students. Automated student record systems can enhance the ability of teachers and administrators to follow student progress and development. School and school jurisdiction personnel can have more timely and accurate student information for decision making purposes, and this information can be easier to access. Automated systems can also help streamline administrative tasks (e.g., reduce the number of forms that have to be completed; allow more accurate and timely attendance tracking; help in assessing student diagnosis and placement, etc.).

Alberta has about 2000 schools ranging in size from fewer than 10 to more than 2500 students. In some of the larger jurisdictions and schools, student records have been automated for almost two decades. These jurisdictions have long recognized that student record automation is both efficient and economical. The rapidly decreasing costs and increasing power of computer hardware, combined with the maturing of student records software, now provide educators in smaller jurisdictions with the opportunity for automation previously reserved for larger jurisdictions.

School and school system interest to automate student records was expressed clearly, both informally and formally, through meetings with administrators from jurisdictions throughout the province and was evident in the results of a survey conducted by the EIE. This survey indicated that 112 of 141 central offices were interested in purchasing provincial school level administrative software. Survey results further indicated that many Alberta schools, largely ECS to Grade 6 and ECS to Grade 12, were interested in automating student records.

Support for automation was also expressed by the Alberta School Trustees' Association when, in 1989, they passed a resolution calling for Alberta Education to play a leadership role in the evaluation of commercial educational administration software and in the establishment of a standard system of electronic information exchange. (See Appendix 1 for the resolution statement.)

In response to this expressed interest in school based student record automation, the EIE undertook an initiative to review, evaluate, and recommend school based student records software.

This report provides an overview of this initiative and begins with a description of the preparations taken prior to beginning the review process. The main topics covered in this section include the request for information from software vendors, formation of the working committee for the initiative, and an outline of the strategy for software review and recommendation.

Next, the evaluation process is described, with stages including the short software demonstrations, the half-day software demonstrations, visits to school sites where software was in operation, a request for vendors to respond to an Invitation to Offer (ITO), negotiations with vendors to reach agreements, and final recommendations of school based student records software that would best meet the functional needs of Alberta schools. A section providing a general overview of the working committee's findings about the top eight software products evaluated follows. The final section provides a summary of the report and some concluding remarks.

2. First Steps

Request for Information

Over 2000 requests for information were sent to vendors of student records and database software between February 1989 and May 1989. More than 70 vendors provided responses. (See Appendix 2 for a sample of the letter requesting information from vendors.)

Vendor names and addresses were obtained from databases at the Department of Public Works, Supply and Services, and the Curriculum branch of Alberta Education. In addition, literature and software database searches were conducted through the Alberta Education library and the University of Alberta libraries.

Working Committee

In February and March 1990, letters were mailed to superintendents of all jurisdictions in Alberta seeking volunteers for membership in the *Working Committee for the Evaluation of School Based Student Records Software Packages*. (See Appendix 3 for a copy of the letter sent to superintendents.) The committee would consist of a cross section of personnel from Alberta Education and from jurisdictions with a vested interest in the evaluation and implementation of school based student records packages, as these jurisdictions would gain the most value from participation. Each jurisdiction member would be responsible for the costs associated with travel and time required for the evaluation and recommendation process.

A list of potential jurisdiction representatives was compiled from the responses to the two mailings. Formal correspondence outlining expectations, time, costs, and benefits was exchanged with these individuals and their superintendents.

Working committee membership was finalized in early March 1990, and consisted of seven jurisdiction representatives and six representatives from Alberta Education. The participating jurisdictions were announced formally by letter to all superintendents on March 20, 1990. (See Appendix 4 for a copy of the announcement letter.) A list of these jurisdictions and their representatives follows:

◆ *Camrose SD No. 1315*	Gerald Lee, Assistant Secretary Treasurer
◆ *Fort McMurray RCSSD No. 32*	Chris Farthing, Educational Technology Administrator
◆ *Grande Prairie SD No. 2357*	Clark Hoey, Principal
◆ *Lakeland RCSSD No. 150*	Jerry Letal, Principal
◆ *Lethbridge RCSSD No. 9*	Jack Gleason, Secretary Treasurer
◆ *Peace River SD No. 10*	Richard Smith, Director of the Media Center
◆ *Yellowhead SD No. 12*	John Percevault, Computer Program Coordinator

The Alberta Education branches that participated in the working committee and their representatives included:

◆ *Educational Information Exchange*	Dan Magnan, Director *(Chairman of the Working Committee)*
	Danny Roberts, Project Officer--Technical Support
	Blair West, Project Officer
◆ *Information Services*	Mary Li, Syste[illegible] Analyst–Student Records
	Sam Radke, Acting Assistant Director
◆ *Student Records and Evaluation*	Donna Scott, Manager, Student Records Systems

Strategy Development

An initial multi-staged strategy for the school based student records software evaluation process was drafted by the EIE and reviewed by the working committee. Each stage was tailored to identify those packages with the highest potential and to refine the evaluation criteria.

The evaluation strategy was finalized in March 1990 with input from working committee members, and consisted of the following steps:

- identification of major areas of functionality required by schools
- development of general evaluation criteria and an evaluation instrument for the short software demonstrations
- invitation to all vendors responding to the request for information to assess whether their software met the general evaluation criteria established by the working committee, and to decide based on that assessment whether they would participate in the initiative
- review of vendor responses and scheduling of short software demonstrations
- short software demonstrations
- determination of software to be evaluated in half-day software demonstrations, based on information gathered during the short software demonstrations
- development of the evaluation instrument for the half-day software demonstrations
- half-day software demonstrations
- determination of the products to be evaluated in visits to school sites where student records software was in operation, based on information gathered in the short and half-day software demonstrations
- development of the evaluation instrument for visits to school sites where software was in operation
- visits to school sites where software was in operation
- finalization of functional specifications and vendor acceptance criteria

- development of an Invitation to Offer
- short-listing of student records software having excellent potential to be recommended for use in Alberta schools, based on information gathered in the short software demonstrations, half-day software demonstrations, and visits to school sites where software was in operation
- distribution of the ITO to vendors of the short-listed software
- review and verification of the accuracy of vendor responses to the ITO by an external group of experienced software users
- determination of the student records software having the highest potential to be recommended for use in Alberta schools, based on the information collected from the short and half-day software demonstrations, visits to school sites where software was in operation, and vendor responses to the ITO
- negotiations with the vendors identified in the final stage of the evaluation process, for school based student records software purchase, maintenance and training prices, and Alberta specific software enhancements

As most student records software is continually evolving, it was decided that a single production[1] version of each software package would be examined throughout the evaluation process. Production software was chosen as a base for the evaluation process because vendor promises of future enhancements cannot be evaluated and may never be realized. In addition, production software is relatively free of 'bugs,'[2] and more accurately represents the product that schools are actually using. This stance was also taken to maintain consistency and fairness in the evaluation process, as well as to make the evaluation process manageable.

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[1] Production software is that which was currently (as of April 23, 1990) released to regular users.

[2] 'Bugs' are programming or design errors which cause problems with software operation.

3. Software Evaluation Process

Stage 1 - Short Software Demonstrations

As the characteristics and functions of individual schools vary widely, student records software needs to be multi-functional and flexible. With these considerations in mind, the working committee identified the following broad areas of functionality as being necessary for student records software to be effective in the school environment: *Demographics, Attendance; Progress Reporting, Scheduling, Student History, Data Input and Output, Ad Hoc Reporting,* and *Other Operational Features.*

Evaluation criteria and requirements for the short software demonstrations were established based on these broad areas of functionality. All vendors responding to the request for information were invited to assess whether their software met these general evaluation criteria, and to decide based on that assessment whether they should participate in short, controlled software demonstrations. (See Appendix 5 for a copy of the letter sent to vendors.) The vendor responses were reviewed and fourteen vendors were scheduled to present their software. (See Appendix 6 for a list of the vendors.)

The short software demonstrations were held in Edmonton during April 3–6, 1990. It was recommended that vendor presentations be no longer than 45 minutes, leaving 15 minutes for questions. Each session was held strictly to one hour and addressed the following areas:

Demographics

- fixed fields
- flexible user controlled fields

Attendance

- daily and half-day
- period and course

Scheduling

- master timetable creation
- class loading
- homeroom loading

Marks and Progress Reporting

- marks and credit
- interim marks
- 'comments' reporting

Historical Information

- course mark, attendance and credits
- standardized testing
- diploma or certificate information

Input and Output Capabilities

- flexible record definition
- ease of use
- change only capabilities

Other General Features

- multi-access
- report writer, etc.

Working committee members completed rating sheets for each software demonstration. The results were discussed, compiled, and used as a basis to make decisions regarding which vendors would be invited to participate in the second stage of the evaluation process.

Stage 2 - Half-Day Software Demonstrations

Evaluation criteria and requirements for the second stage of the evaluation process, which would involve in-depth half-day software demonstrations, were discussed and refined by working committee members in April 1990. General criteria for evaluation included:

Demographics

- flexible user controlled fields
- registration and entry/withdrawal data

Attendance

- period and course
- daily and half-day
- automated and manual input

Scheduling

- master timetable creation
- class loading
- course request input

Marks and Progress Reporting

- flexible marks scales
- final/interim marks
- 'comments' reporting
- marks input
- report cards

Historical Information

- course mark, attendance and credits
- diploma or certificate information
- graduation requirements

Input and Output Capabilities

- flexible record definition
- ease of use
- change only capabilities
- flexible input capabilities

User Interface and Operation

- ease of use
- help screens/table lookup
- screen appearance and organization
- field/record cloning
- screen/field navigation
- security

Reports

- ad hoc reports
- canned reports
- attendance, prescheduling and post scheduling reports

Other General Features

Based on the results derived from the product ratings in the short software demonstrations, eight student records software packages were identified as having good potential to be recommended for use in Alberta schools. In mid-April 1990 the vendors of these products were invited to present half-day

demonstrations of their software. Requirements for the presentations were outlined at length in formal correspondence with vendors, and were tailored to focus on areas working committee members had identified in the short demonstrations as requiring further explanation or clarification. (See Appendix 7 for a sample of the letter sent to vendors.)

The half-day software demonstrations were held in Edmonton during April 23–27, 1990. The presentations were limited to 2¾ hours, with any remaining time to be used for questions. Committee members completed an individual rating form for each product viewed, and consensus was reached on item ratings through both interactive small group and large group discussion. The results of this rating process were used to decide which products would be examined more closely in visits to school sites where software was in operation.

Stage 3 - Visits to School Sites

In April and May 1990, working committee members developed a comprehensive evaluation instrument for the third stage of the evaluation process—working committee visits to school sites where software was in operation. The instrument consisted of two parts: a numerical rating portion and an anecdotal portion to record additional comments and observations. General criteria for evaluation follow:

Demographic Data

- basic demographic information
- entry/exit data
- predefined demographic reports

School Setup

- instructor information
- facilities information
- course information

Scheduling

- course requests
- edit and validation of course requests
- predefined prescheduling reports
- master schedule builder
- class loading process
- predefined post scheduling reports
- junior high scheduling reports
- multiple school timetables

Student Attendance

- entry of attendance data
- storage of attendance data
- predefined attendance reports/inquiries

Student Progress Reporting

- basic features
- student exam scheduling
- predefined student progress reports/inquiries
- student history

Data Export/Import

- export
- import

Ad Hoc Report Writer

- parameters
- maintenance of reports

Operation of Reports

- selection and printing of reports
- operation of reports

User Interface and Operation

- interface features
- system utilities

Based on the information collected in both the short and half-day vendor demonstrations, six student records software packages were identified as having very good potential to be recommended for use in Alberta schools. In early May 1990, the vendors of these products were notified they had progressed to the third stage of the evaluation process, and were asked to provide lists of software operating sites suitable for visits by working committee members. A valid site was defined as a school where trained or experienced operators were using the software release being evaluated. In addition, at least one site per package must have been using that package for one complete school-year cycle and using the modules directly related to student records.

The strategy of gathering evaluative information by visiting school sites where software was in operation was chosen over in-house testing and simulations. It was felt site visits offered the best opportunity to collect more in-depth information, as well as to gain a better understanding of how well software

packages met the functional needs of schools in a variety of unique school environments. In-house performance testing and simulation of a wide variety of operational environments were deemed to be difficult and time consuming.

Visits to school sites were conducted during May and June 1990 by working committee members. Operating installations were visited in Alberta, British Columbia, Manitoba, and Ontario. Each package was viewed by a combination of Alberta Education and school based committee members. The short and half-day software demonstrations provided the basis for determining features that required further exploration. During the visits, working committee members also explored operational issues, levels of satisfaction, vendor service records, software performance, etc. with users.

Committee members completed a product rating form for each software package viewed. The numerical portions of the product rating forms were summarized by EIE staff in June 1990, and one member from each school site visit team was assigned the task of collecting and consolidating the anecdotal portions. The summarized numerical and anecdotal results were reviewed at length by the working committee in June 1990. Consensus was reached on product ratings through both small and large group discussions. The results of the process were used to make decisions regarding products to be short-listed for the next stage of the evaluation process.

Stage 4 - Invitation to Offer

Working committee members discussed, refined, and enhanced the evaluation criteria used in the first three stages of the initiative to develop a comprehensive evaluation instrument for the fourth stage of the evaluation process—the Invitation to Offer.

The ITO was over 40 pages in length and consisted of several sections requesting information on product features and operation, Alberta specific pricing structures, support, enhancements, and maintenance The ITO also requested information from vendors regarding software characteristics and performance features (i.e., functional specifications), action vendors were willing to take to meet Alberta Education and school requirements for school based student records software, and 'work-arounds' (i.e., alternatives to functional specifications if those specifications were not available in the vendor's software). (See Appendix 8 for a more detailed list of the functional specifications contained in the ITO.)

In June 1990, the working committee members short-listed those student records software packages with excellent potential for recommendation for use in Alberta schools. Decisions were based on the information collected in the short and half-day vendor demonstrations, as well as the operating site visits. Vendors were notified that their products had been short-listed and were invited to respond to the ITO.

The Invitations to Offer were sent to the short-listed vendors on October 24, 1990, and were required to be returned by noon on November 15, 1990. Even though the submission deadline for vendor responses and the conditions for non-compliance were explicitly stated in the ITO, one of the four vendors failed to return their response within the specified timelines. As Alberta government policies are strict in such matters, the late submission could not be accepted.

To supplement the information that would be used by working committee members in the decision making process for this stage, two experienced users per package were recruited to validate portions of the ITO from the user perspective. It was recognized that although the experienced users each held expertise in the operation and implementation of one particular package, these users did not have the broad perspective of the working committee. In December 1990, the experienced users were inserviced for two days to develop a common understanding of the functional specifications established by the working committee. Following the inservice, each user individually verified the accuracy of the vendor responses to the functional specifications and their suggested 'work-arounds.'

The working committee reviewed the summarized findings from the experienced users and the vendor responses, and then rated the software using the following acceptance criteria:

School Level Package Functionality (70%)

- fit to the functional specifications
- package performance
- system reliability
- items not addressed by the functional specifications, yet available in the package

Support and Enhancement (10%)

- customer support policy and support record
- enhancement policy and enhancement record
- training policy and training record
- Alberta based office for customer support and training
- willingness to enhance the package to meet specific client needs

Vendor Profile (5%)

- overall commitment to the client
- stability and product warranty
- responsiveness to customer needs
- installed customer base

Cost Issues (5%)

- cost of software
- cost of training
- cost of maintenance and support
- cost of hardware platform and operating system software

Package Alterations (5%)

- recent alterations and/or enhancements made to the package
- alterations and/or enhancements the vendor is willing to make

Protection for Alberta Clients (5%)

- from vendor insolvency
- from vendor failing to meet contractual obligations
- from vendor providing unacceptable performance on requested future upgrades
- from vendor charging unreasonable prices for future enhancements and extra modules

As a result of this process, the working committee recommended that negotiations be initiated with Trevlac Computer Services Ltd. and CBT/Columbia Computing Services to establish an agreement with one or both of these companies.

Stage 5 - Negotiations and Recommendations

After committee members reviewed summaries of the ITO submissions from the two vendors and the findings of the experienced users, they provided direction on the Alberta specific enhancements, pricing structures, support and maintenance issues to be emphasized during negotiations with the vendors.

With this general direction from the working committee, Alberta Education negotiated with Trevlac Computer Services Ltd. and CBT/Columbia Computing Services to establish provincial agreements on behalf of Alberta schools and

school jurisdictions. The negotiations resulted in a Memorandum of Understanding with each vendor. The agreements specified purchase, maintenance, and training prices, as well as Alberta specific enhancements with their projected completion dates.

The following two software packages (listed alphabetically) were recommended for use in Alberta schools:

- *The School Administrator Series* by Trevlac Computer Services Ltd.
- *The School System and The Elementary School System* by CBT/Columbia Computing Services.

The recommended packages were announced to schools and school jurisdictions in March 1991. (See Appendix 9 for a copy of the letter of announcement.)

4. Findings

This section provides general overviews of the top eight software packages evaluated by the *Working Committee for the Evaluation and Recommendation of School Based Student Records Software*. These overviews are intended to cover most of the major characteristics of each software package. However, due to the complexity of student records software packages, the summarized descriptions are not parallel between packages, and will not necessarily address every software feature.

While throughout the initiative working committee members focused on a single version of each software package, information about future developments was noted throughout the evaluation process but was only considered when applying the acceptance criteria in the final stages. Supplementary information on recent developments with selected products is included in the overviews as this information could be pertinent for schools planning to make student records software purchases.

Advice:

Schools and school systems should note that implementation of any of these packages is an intensive process requiring dedicated administrative and clerical personnel, resources clearly allocated for support and training, and release time for staff training. The Yellowhead School Division, in cooperation with the EIE, has developed a *Guide to Student Records Automation* to provide information regarding the steps involved in implementing an automated student records system. This guide gives suggestions and tips on planning, needs assessment, software and hardware selection, system implementation, and support, and is available from the EIE upon request.

Recommended Student Records Software

Listed alphabetically, *The School Administrator Series* and *The School System Family* have been recommended by the *Working Committee for the Evaluation and Recommendation of School Based Student Records Software* for use in Alberta schools.

☛ *The School Administrator Series* (Trevlac Computer Services Ltd.)

Trevlac Computer Services Ltd. is a Canadian company based in Ontario. Their products, the *School Administrator Series (SAS)* for elementary and secondary schools, are relatively new entries in the student records software market in Alberta. *SAS* has been in use for a number of years in Ontario schools and was adopted as the recommended provincial package by the Manitoba Ministry of Education approximately three years ago. Support is provided through an 800 telephone service. Training in Alberta will be provided on a request and charge basis for those schools and jurisdictions that purchase the software.

The single user system operates in the MS-DOS environment with multi-access through XENIX and local area networks such as Novell, Lantastic, Port, etc.

The database has many user-defined fields, allows customization at the school level, and allows the user to do extensive ad hoc reporting. There is also a fixed data import capability and a flexible data export facility which can be defined and controlled by a moderately knowledgeable user of the system.

The timetabling module accommodates a variety of scheduling formats, as well as prerequisites and other course relationships. Available reports include tallies, conflict matrices, course lists, timetable loads, partial student schedules, various timetables, etc. Creation of the master timetable is facilitated by an interactive program called the Master Timetable Builder's Assistant, which is included as part of the *Secondary School Administrator*. An optional program called the Rotary Timetable Builder is available for timetable creation in elementary and junior high school settings. This program has not been thoroughly demonstrated within the unique timetable structure used by Alberta junior high schools.

The attendance module stores daily or class attendance data. Users have the option of specifying one or more groups (e.g., sports teams, clubs, etc.) as being absent for one or more periods. Students that have questionable absences can be flagged and individual appointment slips can be printed for each one. Group attendance deviation lists can also be generated. Absence codes can be assigned to identify excused and unexcused student absences, and individual student attendance profiles can be created. Multiple school organization (e.g., differing timetable structures within one school and year) and certain anomalies in

attendance patterns within a given school are not easily accommodated (e.g., half-day ECS attendance or two whole day and one half-day per week ECS attendance).

The software has an extensive and flexible end user report writer that can access most of the system's stored data fields. Data can be placed almost anywhere on the printed page, and information to be printed is chosen through a flexible select mechanism. As there are few standard reports available when the package is first installed, new users must quickly learn to create their own reports with the report writer. The vendor, as part of the negotiated agreement with Alberta Education, has agreed to address this issue by developing a number of standard reports for Alberta schools.

The product requires the user to have some knowledge of the operating system for best operation. As there is substantial customization available, individuals implementing this software should ensure they are adequately trained and that school and jurisdiction level implementation issues have been addressed.

☛ *The School System Family* (CBT/Columbia Computing Services)

CBT/Columbia Computing Services has been a supplier of school based student records software and associated microcomputer based software since 1968. Their main product, *The School System*, was developed initially to meet the demographic, scheduling, attendance, and grade reporting needs of high schools. *The Elementary School System* has also been available for a number of years. Support is provided through an 800 telephone service. Training is provided in Alberta by the vendor on a charge basis through circuit training and special requests. CBT/Columbia Computing Services are currently working on a pilot with Alberta Education to develop and test the electronic exchange of high school marks and related data.

The product is MS-DOS based with multi-access accomplished through local area networks such as Novell and 3-Com.

The software has shown reliability in processing and performance in Alberta schools and provides good protection for validity of data. All applications are integrated through the proprietary relational database. The architecture is dated but has been enhanced to exhibit some of the improved human interfaces seen in more current software. System security allows many levels of user access to provide both protection of data and limits on user capabilities. A flexible data exchange (import/export) feature is available.

The student records module contains basic demographic fields, user defined fields, health data, discipline data, and entry/withdrawal data. However, additional end user customization of the database in the demographic area is limited.

The student scheduling module has many capabilities, including accommodation of prerequisites and corequisites as well as various scheduling modes. Standard reports include tallies, potential conflicts, master timetable loads, various timetables, partial student schedules, etc. The scheduler (student to class loader) meets most Alberta junior and senior high school requirements.

The master builder module helps build a master schedule. The user lists the school resources, such as teacher and room, and a number of other constraints. The master builder meets the needs of most Alberta high schools but does have limitations in applicability to Alberta junior high schools.

The Attendance system tracks daily and period by period attendance, with data capture by keyboard or scanner. It allows assignment of reason codes to identify both excused and unexcused student absences, records disciplinary events, creates individual student attendance profiles for a specified date range, and automatically summarizes attendance data for report cards and transcripts.

The Academic Progress system maintains complete academic information on each student, produces report cards, and creates transcripts as required. Other reports include class rank lists, grade distribution analysis, honour roll, failing grade lists, etc. A variable roster feature allows the user to create customized reports, however, this feature has limited end user ad hoc reporting capabilities. All reports can be queued for overnight printing.

Protection of the inexperienced user from the operating system and the robust nature of the product (i.e., infrequent crashes and good crash recovery) are strong features. Because of the software's functionality, substantial time must be allocated for adequate training.

Alternative Student Records Software

Listed alphabetically, the following products have been identified by the working committee as suitable for use in Alberta schools. Each package has features that were highly rated by the working committee during the evaluation process. However, for various reasons, the products did not become one of the recommended packages

Mac School (Chancery Software Ltd.)

Chancery Software is a Canadian company based in Vancouver, British Columbia. Their main product, *Mac School*, is a school administration system designed to run on the Macintosh family of computers.

The vendor missed the deadline for returning the Invitation to Offer, and the software was subsequently disqualified from further consideration.

At present *Mac School* does not exchange high school data electronically with Alberta Education, but development of this capability is being discussed with the vendor. Individual school and district-wide 800 number support and upgrade programs are available; however, it should be noted that concerns were expressed by some *Mac School* users in Alberta regarding third party software support being provided by Chancery agents.

The product exhibits the simple and intuitive human interface common with the Macintosh computer. Although the vendor indicates that specific hardware configurations depend on school size and the number of stations on the network, a minimum configuration of a Macintosh SE with 2 Mb of RAM and a 20 Mb hard drive is recommended. This computer configuration should run a limited number of modules effectively; however, larger schools would require more powerful computers.

The demographic module allows for a variety of student data. The Scheduling module builds, among other things, a conflict matrix, the master timetable and student timetables. Reporting options include student, teacher, course, room and master timetables in list and matrix formats. The attendance module records students' daily, half-daily and period attendance and allows user-defined excused and unexcused attendance codes.

The report card module summarizes information from attendance and grade book modules, including teacher comments, to create report cards. Comments are user defined and integrate student names and gender. Report cards,

transcripts, honour rolls, class rank, mailing labels, and grade point averages can be printed in user-defined formats.

Mac School has a relatively powerful ad hoc report writer which is easy to learn. Reports can be sent to the screen or printer. All modules have varying levels of security and the user can set an unlimited number of passwords giving access to any combination of modules. Optical scanners can read in attendance, grades, and course request data. An import/export utility allows ASCII data to be transferred to/from other computer systems.

After an extensive search both within and outside the province of Alberta, the working committee was unable to find a large school site using all the features of the student records software, and in particular the complex scheduling and attendance features. The working committee was therefore unable to verify *Mac School's* capabilities in large school and heavy data processing environments for the collection and reporting of class attendance, as well as for master timetable creation in the complex Alberta scheduling environment.

Version 3.0, a major upgrade of the software, is only now being implemented in Alberta schools. There have been substantial delays in shipping this upgrade, so the performance and usefulness of the new enhancements are just beginning to be assessed by *Mac School* users.

School Administration System (Maplewood Computing Ltd.)

Maplewood Computing Ltd. is a Canadian company based in Ontario. Maplewood systems have been used by schools since 1980. There are currently no operating sites of this software in Alberta.

This product runs primarily in the MS-DOS environment with multi-access through the use of local area networks.

The attendance module provides full period by period and daily attendance. A permanent attendance register shows each student's attendance in every period of the school year. A record of class changes is also kept and the display of attendance reflects all class changes. A file may be created for students whose attendance requires special attention. This file may contain an unlimited number of dated entries to document such information as visits to attendance counsellors, etc.

The building of the master timetable can be accomplished through the master builder, which provides information and assistance in constructing a timetable. An automatic placement feature will place individual classes or groups of classes

in the timetable. Examinations may be automatically scheduled with up to nine days and three periods per day specified.

Lists, reports, and timetables which are commonly required are pre-designed and available as required. By using the ad hoc report builder feature virtually a information may be included in reports. Also, through the use of the report builder, export files may be constructed which will transfer data to word processors, spread sheets, databases, mainframe computers, or any other application that will accept data from an outside source.

The product has a very user oriented approach with help information constantly displayed on the screen. The screen also allows for on-line table lookup. Custom screens may be designed to display a different collection of student information than is displayed in the standard program screens. The system also features multi-level password protection.

The software is being updated frequently, with no distinct releases identified by the vendor. It appeared to be in a major state of revision so the working committee had difficulty determining what was part of the product and what was in the development stage. Heavy processing in the large school environment appeared to be slow, which could be problematic in tasks such as class attendance processing commonly performed in Alberta high schools. Unusual internal file structures, storage of redundant data, and a coding language that is not commonly used in this type of software were also a concern.

Student Information Records System (Management Information Group)

The Management Information Group (MIG) is a Canadian company based in St. Albert, Alberta, and has been supplying municipal governments and Alberta school boards with financial and administrative software since 1977. Their product, the *Student Information Records System (S.I.R.S.)*, has been in operation for some time in a number of Alberta schools. The vendor has developed a new product called the *Elementary School Program (ESP)*, which was not evaluated as it was not production software as per the April 1990 deadline established by the working committee. MIG is a vendor of hardware as well as software.

S.I.R.S. operates in a multi-access mode through a Unix-like operating system, and in a single user mode under MS-DOS. Access to programs and functions is controlled by a menu system and is password protected. *S.I.R.S.* provides optical scanning support to streamline many large data entry processes.

The system provides for a variety of demographic data for each student and has recently incorporated the draft versions of the data elements proposed for

collection by the Educational Information Exchange. It can accommodate students at all grade levels and data is maintained in an on-line mode. Many general reports are provided for regular school operational requirements. Specialized reporting is provided through interaction with the report generator to move selected data into database and word processing programs.

Marks are automatically updated to student academic history and are included in department reporting. Report options include marks report, report cards, marks analysis, average marks report, student averages, and high school results statements. Attendance can be maintained by full or half-days for lower grades and by class for high school grades. Registers are produced daily or weekly. A number of reports are available to provide for attendance control and include attendance statistics, selective reporting, and attendance letters.

The scheduling module has no automated or semi-automated master board builder so the timetable is developed manually with information reports supplied by the system. Tally lists, pairs lists, and conflict matrices can be produced and are helpful in developing the master board. Multiple simulations can then be run to find the best timetable.

S.I.R.S. has been specifically developed for school use in Alberta; thus changes in school and Alberta Education requirements should be easily accommodated. The product continues to be in synchronization with Alberta Education's coding and reporting requirements, and is highly rated in its capability to exchange high school marks related data with Alberta Education.

The *S.I.R.S.* database is quite structured with only minimal user customization capabilities available. The lack of user defined fields results in the need for continuing modifications at the vendor level, and there is no easy to use, flexible ad hoc report writer. A number of convenient features such as screen table editing, help, and table lookup are minimally available.

S.I.R.S. did not meet the final acceptance criteria established by the working committee as closely as did the recommended packages.

Alternative Student Records Software for Jurisdiction Implementation

Listed alphabetically, the following products were judged by the working committee to be suitable for use at the district level. Although all of the following vendors indicated that their software could operate on a stand-alone basis at the school level, the working committee felt that, at this time, these packages were more suitable for district wide implementation in medium to large sized jurisdictions.

Jurisdictions investigating one of these alternatives should carefully examine issues such as software, training, and support costs involved in choosing these packages for implementation, as well as the hardware and operating system maintenance costs. While this option would likely offer increased functionality, the costs may be significant, especially in the case of small jurisdictions.

Districts that have schools in remote and distant locations may also experience difficulties with the quality and costs of terminal operations and data transfer via telephone lines to central office locations.

POISE Student Information System (Campus America)

The *POISE Student Information System* (formerly a product of Sierra Software) was recently acquired by Campus America, a large supplier of student records, finance, test scores, CMI, etc. software within the United States and Canada. The software is not running in any Alberta schools or school jurisdictions and would not currently accommodate the Alberta data exchange requirements. A significant amount of customization would be necessary to make the software meet Alberta requirements.

The package is a full featured student records system operating in the VAX environment. It can be run in the microVAX environment but with such full features would probably need to be migrated to the larger VAX machines through time to accommodate growing data processing requirements.

The student records component includes all the functions necessary to register a student. The amount of student data retained is determined by the user. There is an unlimited number of contact numbers per student, an unlimited amount of historical student data, flexible report and label creation, inquiry into all aspects of student demographic and academic data, and the ability to create user-defined demographic fields.

The marks administration component allows the entry of letter or numeric marks. Transcripts are available at year-end, but interim transcripts reflecting completed classes and classes in progress can also be prepared when needed. Inquiries provide complete student profiles including current and past achievements. The use of comments, work habits, and attendance data is optional.

Two attendance recording methods are available—daily or by period. These supplement the semester attendance reporting available through the marks administration component. All attendance data is available through inquiry. Data is accumulated for reporting purposes and absence letters and reports can be produced on demand.

The report writer component can access a number of data files for any report. It allows arithmetic calculations, comprehensive screen prompting for non-technical users, cross referencing, and is capable of producing a wide variety of reports.

The scheduling component provides for both student demand and arena scheduling. It schedules up to four terms at a time, eight days per cycle, 32 blocks per day. Allowance is made for prerequisites and corequisites, student load per term and across terms are balanced automatically, and classes are balanced in relation to gender and overall sections. All changes to schedules are performed

on-line and re-runs are allowed for each term. Reports include student schedules, partial student schedules, and room and teacher schedules.

The POISE system can be tailored to meet a school's requirements as the application is installed. It features help texts and a series of prompts to guide users through functions. The system features an integrated relational database design and a consistent screen interface.

Data is password protected on a variety of levels. The table driven software allows users to develop their own screens and menus without programming.

Student Information System (Strathcona County)

The *Student Information System (SIS)* was initially designed using a district-wide approach to meet the needs of schools in Strathcona County. The software maintains a strong data validation structure with links to other modules such as grants and residence information. *SIS* accommodates Alberta Education's proposed demographic student data elements. In addition, for a number of years, *SIS* has been successfully exchanging high school marks data electronically using a magnetic tape medium. In summary, the software supports the data collection, storage, and reporting requirements of Strathcona County. Jurisdictions with

similar information requirements and operating philosophies could benefit by using it. However, as new vendors of student records software, Strathcona County would have to develop an additional support and enhancement structure to adequately address requests by their customers.

The product was developed on the VAX mini/mainframe computer environment and the vendor has stated that the software can run on a number of other hardware platforms. However, at the time of the evaluation, *SIS* had not been ported to alternative hardware platforms.

SIS features a number of data entry screens designed for optimal data capture in large volumes, such as attendance, marks, and course requests. An optical scanner interface was in the development stage at the time of this evaluation.

While the student demographic area has an extensive number of fields and strongly conforms to Alberta Education's data specifications, it has little capability for end user customization. This area features flexible search capabilities and on-line help through 'hot keys.'

Course and course section information is provided on a single screen, with standardized course names and a large amount of additional course information for scheduling, reporting, and other district needs. Course types, maximum seat counts, and flexible meeting times and locations used in the scheduling process are also available. The course load is shown for all students, including those attending multiple schools. Grid or conventional timetables are available for elementary, junior high, and senior high schools.

Class attendance information, including both absence and late information, is available on screen by calendar month for the entire school year. It can be accessed directly from the course requests maintenance screens, where summary absence and late data is displayed, or from the student demographic area.

SIS allows for parameters to be set to define the marking period, multiple mark entries, and a maximum of two comments per course per marking period. Credits are assigned automatically if a passing mark is entered and current year as well as cumulative credits are maintained within the system.

The report writer system features a number of determined selection criteria, the capability for multiple sorts, and the ability to view sample reports and view reports prior to printing. An easy to use ad hoc report writer which allows relatively inexperienced users to create custom reports is not part of this system.

Strathcona County has made the necessary program enhancements to ensure that data elements and input/output records are compatible with Alberta Education

requirements. However, while data import and export for Alberta Education purposes are well developed, no provision is made for end users to define and manipulate data export to other systems.

Student Records System (Calgary Board of Education)

The *Student Records System (SRS)* is a fully integrated system which has been customized to meet the needs of the Calgary Board of Education. A continuing education package has also been developed. System-wide information can be extracted by central office, eliminating the need to request information from schools. Central office staff access is rigidly controlled and is provided on a 'read only' basis, as changes to student data can usually be made only by the schools. *SRS* transfers data electronically to Alberta Education on magnetic tape. Flexibility has been built into the system to accommodate the varying needs of schools in the jurisdiction.

SRS has been developed and operates in a VAX mainframe environment with terminals at the school site. Many terminals currently in use have data processing capabilities as they are also stand alone personal computers, but the main data storage and processing occur at the mainframe level.

The registration module forms the database used to store student demographic information, including student personal data, entry and withdrawal information, as well as emergency, academic, and busing data. Entry of some of this data is optional and the maintenance of this optional information is left to the school's discretion. This module also includes report and label generators, which give individual schools the ability to design and print customized reports and/or labels based on the information contained in the database.

The scheduling module has the ability to create and maintain a teacher catalog, course catalog, and student course request file. In the normal sequence of events, the user then creates a master schedule which is used to schedule students into classes.

The daily attendance module tracks day by day student attendance (usually twice daily, by homerooms) for the current school year. A variety of reports can be produced to monitor student attendance. The subject attendance module tracks student attendance on a class by class basis and maintains an attendance record for each course in the student's schedule. As in daily attendance, a number of reports are available to monitor student attendance.

The marks reporting module is designed to store student marks data, and calculate mark averages, honour roll etc., in addition to its report card function. If

a school is using either attendance module, the attendance for each mark reporting period will appear on the report card. The student history module allows the storage of achievement and standardized testing data, in addition to a course planner, student profile, and transcript. Final grades are automatically transferred to this file, eliminating the use of cumulative record forms.

This system would be suitable in environments which process large volumes of data and which possess high level technical support personnel. On becoming a vendor of this software, the Calgary Board of Education would need to develop a structure to address support and enhancements as requested by the customer jurisdictions.

5. Conclusion

The purpose of this initiative was to evaluate and recommend school based student records software for use in Alberta. The evaluation was conducted according to a thorough and objective process developed specifically for the initiative. A single version of each of the software packages was used throughout the process to ensure fairness and consistency; however, information on future developments was considered when applying the acceptance criteria in the final stages of the evaluation process.

The basic philosophy underlying the working committee's approach was that evaluation of student records software should be a multi-staged process. Thus, a five level evaluation process was developed, with working committee members using progressively more detailed selection criteria at each stage. The process culminated with the recommendation of the following two school based student records software packages:

- *The School Administrator Series* by Trevlac Computer Services Ltd.
- *The School System and The Elementary School System* by CBT/Columbia Computing Services.

Schools and school jurisdictions considering the implementation of either of the recommended packages should note that student records automation is a complex process, and are thus encouraged to examine and apply the acceptance and functional criteria *to their own unique school settings* prior to making any commitments. In addition, schools and school jurisdictions are advised to refer to the *Guide to Student Records Automation* (available on request from the EIE) to gain a better understanding of the steps involved in implementing an automated student record system.

Appendix 1

ASTA Resolution

At their November 1989 annual convention, the Alberta School Trustees' Association passed the following resolution regarding Alberta Education's leadership in assisting jurisdictions to choose and purchase school based student record software:

"BE IT RESOLVED that the Alberta School Trustees' Association strongly encourage the Government of Alberta to evaluate commercial educational administration software, and select a standard package that will meet the needs of local systems and provide for a compatible electronic exchange of information; to negotiate provincial pricing, licensing and maintenance agreements with the software vendor of choice; and to work toward the establishment of a standard system of electronic information exchange among all levels of government (Resolution 30M/89)."

Appendix 2

Request for Information

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

February 20th, 1989 *[Similar letters were sent to more vendors on different dates to solicit additional responses.]*

Re: Student Records Software - Educational Information Exchange

The Educational Information Exchange (formerly the Student Registry Project) is a new service-oriented project currently being undertaken by Alberta Education. More detailed information regarding the project is enclosed.

One important goal of the Educational Information Exchange is to investigate computerization and new information technology that can facilitate collecting and transferring data between schools and school systems and Alberta Education. Project staff will investigate some of the possibilities inherent in using the computer as a tool for data and information exchange and student record management by:

Phase 1:

- identifying and reviewing student records software available for purchase by schools wishing to develop computerized student record systems;

Phase 2 (Proposed):

- evaluating student records software for possible authorization by Alberta Education (schools wishing to develop computerized student records systems could choose from this recommended software if desired); and,
- assessing the feasibility of negotiating a provincial licensing agreement for a multi-purpose, multi-level student records software package.

Publishers are asked to forward student records software and additional information, as indicated in the attached criteria, for Phase 1 review. If desired, publishers may also forward an expression of interest (in writing, by telephone, or by Fax) to provide a demonstration in Edmonton. Software and letters of interest should be submitted to:

Helen Scarth, Consultant
Educational Information Exchange
Alberta Education
Box 43
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

Telephone: (403) 427-5306
Fax: (403) 422-4200

Please note that this request applies to all student records software running on all hardware bases. However, vendors with student records software operating on the Apple II hardware base are asked to FAX or courier the information requested above for earliest possible review in conjunction with an associated project. The deadline date for all submissions is **March 27, 1989.** The Educational Information Exchange will not purchase software which is requested for review and demonstration purposes. Publishers will be notified (in writing) when the review is completed.

Thank you for your cooperation in assisting us to identify appropriate student records software.

Sincerely,

Dan Magnan
Director
Educational Information Exchange

Appendix 3

Formation of Working Committee

MAILED TO SUPERINTENDENTS OF ALL SCHOOL JURISDICTIONS IN ALBERTA

EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

February 21, 1990

«name»
«position»
«board»
«address»
«town», Alberta
«code»

Dear «salutation»:

The Educational Information Exchange (EIE) has been working on a number of initiatives in support of student record automation over the past year. One of these initiatives is to identify, review and recommend school level student record software packages.

We are currently in the process of forming a working committee to support this initiative, and are seeking membership from jurisdictions who are in the initial stages of automating their student records at the school level, or are planning to automate at the school level in the near future. Attached is an overview of the proposed evaluation and recommendation process, terms of reference for the working committee, and commitment required for participation.

If you are interested in having your jurisdiction considered, please contact Blair West by telephone at 427-9655 or Fax at 422-4200 by March 2, 1990.

If you have any questions or concerns, please do not hesitate to contact Blair or me at the above noted numbers.

Yours truly,

Dan Magnan
Director
Educational Information Exchange

Proposed Evaluation and Recommendation Process for School Based Student Record Software Packages

Overview

One of the leadership roles of the Educational Information Exchange (EIE) is to promote school and jurisdiction student record automation. In support of this role, we have undertaken an initiative to identify, review and recommend school based student record software packages that best meet the functional needs of Alberta schools and data requirements of Alberta Education.

Software packages have been identified through a 'request for information' process, and we are now moving to the review and recommendation stages.

The EIE recognizes the magnitude and complexity of this task and proposes to work in conjunction with interested jurisdictions using a working committee approach. The mandate of the working committee would be to:

- establish criteria for package selection
- conduct a general evaluation of software packages according to broad criteria
- examine in detail short-listed packages
- recommend packages which best meet the criteria.

Please note that this initiative will not automatically recommend a software package for any given computer platform. It is possible that for a given platform, no software package will adequately meet the functional specifications as determined by the working committee. Please also note that the recommended packages will be limited in number, and will not be mandated for use in Alberta schools.

Working Committee Membership and Benefits of Participation

It is anticipated that the working committee will be composed of assistant principals, principals, computer coordinators, and deputy superintendents. Vendors and private consultants will not be eligible for committee membership.

We are seeking membership from jurisdictions that are in the initial stages of automating student records at the school level, or who are planning to automate their schools in the near future. These jurisdictions would gain the most value from participation in the working committee process, as selecting a school based student record package is a very complex and time-consuming process. Examples of some of the complex factors that must be considered in the selection process include:

- there currently exists a wide range of software packages running on a variety of computer platforms
- the needs of individual schools and jurisdictions vary according to school, size, organization, and operating philosophy.

Potential benefits of committee membership include:

- General exposure to as many as 15 student record software packages and in-depth analysis of short-listed packages will help focus the needs of your jurisdiction and provide realization of the benefits of automation.
- The strengths and weaknesses of the packages reviewed will be known and documented.
- When the final decision is made by your jurisdiction, you can be confident that important software packages and issues have not been overlooked.
- A number of people involved with the committee will have experience in the implementation of student records packages, so known pitfalls will be exposed before your implementation begins.

Financial Commitment

This initiative breaks somewhat with Alberta Education's past practices of providing financial incentives to school systems to be involved in developmental activities. Unfortunately, the EIE is not in a position to provide travel reimbursement, honoraria, staff subsidies, free or subsidized software, hardware bonuses, pilot implementation status, or preferential implementation support. The primary gain for your jurisdiction will be the experience and expertise gained by the jurisdiction representative involved with the evaluation and recommendation process.

Time Commitment and Proposed Meeting Schedule

A commitment of 20-25 working days would be required by committee members between now and the end of the school year. A proposed meeting schedule follows:

Dates	Number of Meeting Days	Place	Activity
March 9	1	Edmonton	The role of the committee would be confirmed, timelines for activities would be established, and fine tuning of the selection criteria would begin.
April 2-6	4	Edmonton	Fine tuning of the selection criteria would be completed. Short, controlled demonstrations of vendor software would be arranged. These demonstrations would be limited to 45 minutes and would cover overviews of demographic information, attendance, marks reporting, scheduling, and input/output capabilities.
April 23-27	4	Edmonton	Vendors with the highest potential software would give half-day in-depth demonstrations of their software.
April 30-June 1	10	TBA	More information about the shortlisted packages would be gathered by working committee members through: • hands-on sessions working with the software • visiting sites where the software is running • contacting current software users to identify operational issues and levels of satisfaction • investigating and logging vendor characteristics • collecting and considering other relevant information.
May 25-June 8	3	Edmonton	The final list of recommended packages and required enhancements would be developed. Following this, Alberta Education would initiate price negotiations and a schedule for enhancements with the successful vendors.

Deadline for Participation

Please contact Blair West, Project Officer at 427-9655 no later than **Friday March 2, 1990** if your jurisdiction is interested in participating in this initiative. If you have any questions or concerns, Blair West will be available to answer them.

Appendix 4

Announcement of Jurisdictions Participating in Working Committee

MAILED TO SUPERINTENDENTS OF ALL SCHOOL JURISDICTIONS IN ALBERTA

EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

March 20, 1990

«name»
«position»
«board»
«address»
«town», Alberta
«code»

Dear «salutation»:

One objective of the Educational Information Exchange (EIE) is to promote school and jurisdiction student record automation. In support of this objective, we have undertaken an initiative to identify, review and recommend school based student record software packages. A letter sent to you in February requested that any jurisdiction interested in taking part in this initiative as a member of a Working Committee should contact the EIE by March 2, 1990. I am pleased to announce the names of the seven jurisdictions which agreed to participate:

- Camrose School District No. 1315
- Fort McMurray Catholic Board of Education, School Division No. 32
- Grande Prairie School District No. 2357
- Lakeland Roman Catholic School District No. 150
- Lethbridge Catholic Separate School District No. 9
- Peace River School Division No. 10
- Yellowhead School Division No. 12

The first meeting of the Working Committee was held on March 9. Future meetings will involve activities such as finalization of the software evaluation criteria, software demonstrations, investigation of a limited number of high potential packages, and development of a set of recommendations. The outcome of these activities will be made available to interested schools and jurisdictions.

There is still an opportunity to join the Working Committee if your jurisdiction would like to be involved in this process. If you are interested, please contact Blair West by telephone at 427-9655 or Fax at 422-4200 by April 16, 1990.

We look forward to working on this important initiative in cooperation with jurisdictions, and would welcome your participation.

Yours truly,

Dan Magnan
Director
Educational Information Exchange

Appendix 5

Requirements for Short Software Demonstrations

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

March 13, 1990

«name»
«company»
«address»

Dear «salutation»:

Alberta Education is now beginning the process of reviewing and evaluating student records packages for use in Alberta schools. This invitation is being sent to you because you have indicated your wish to have your package considered when we conduct our evaluation.

A working committee of interested department and school system personnel has been formed. This committee includes principals, secretary treasurers, and computer coordinators. The first task of the working committee will be to establish detailed specifications (criteria) for Alberta Education data requirements and functional usefulness of the software for Alberta schools. Packages will be evaluated against these criteria through:

- short controlled demonstrations
- more indepth demonstrations of high potential packages
- indepth field study of a few very high potential packages

This will result in the recommendation of a package(s) for use in Alberta schools. Please note that packages will be recommended to schools and school jurisdictions and will not be mandated.

The round of short vendor demonstrations will be held in Edmonton during April 3-6, 1990. Each vendor will have one hour to give an overview of their product. The presentation must be no longer than 45 minutes which will leave 15 minutes for questions, however the elapsed time will be held strictly to a total of one hour. This overview must address the following areas.

Demographics
- fixed fields
- flexible user controlled fields

Attendance
- daily and half day
- period and course

Marks and Progress Reporting
- marks and credits
- interim marks
- verbiage reporting

Scheduling
- master timetable creation
- class loading
- homeroom loading

Historical Information
- course mark, attendance and credits
- standardized testing
- diploma or certificate information

Input and Output Capabilities
- flexibility of record definition
- ease of use
- change only capabilities

Other General Features
- multi access
- report writer
- etc.

It is expected that the short presentation will use the vendor's production software resident on a local computer. Handouts outlining the content of the presentation should be distributed at the beginning of the presentation. The demonstration must be set up to meet the needs of 10-15 people. An overhead projector will be made available, however any other hardware requirements such as computers, overhead tablets, etc. will be the responsibility of the vendor.

As indicated above those packages considered by the committee to be of high potential will be notified by April 13, 1990 and invited to give a detailed demonstration of the product during April 24-27. Following the detailed demonstrations, companies will be invited to respond to a formal request for proposals. In addition, vendors will be asked to grant permission for working committee members to collect detailed and summative information from their customer base.

The few highest potential packages identified by the detailed demonstration will be examined closely by the working committee members during May and early June. More information about these packages would be gathered by working committee members through:

- hands-on sessions working with the software,
- visiting sites where the software is running,
- contacting current software users to identify operational issues and levels of satisfaction,
- investigating and logging vendor characteristics, and
- compiling various pieces of relevant information such as performance, vendor record, etc.

This phase of the process will result in the recommendation of a package or limited number of packages for use in Alberta schools. To be eligible for recommendation a vendor must participate at each stage of the process.

Alberta Education is not responsible for any costs incurred by a vendor who decides to become involved in the evaluation process.

If you desire to participate in this process please telephone Margaret Voice or me to arrange a demonstration time and fill out the enclosed form indicating your intentions. You will need to call soon to select a time for your short demonstration. Times will be on a first come first served basis. Forms must be returned prior to March 29, 1990 if you choose to be involved.

If you have any questions please do not hesitate to contact me.

Yours truly,

Blair West
Project Officer
Educational Information Exchange
(403) 427-9655

Student Records Software Evaluation - Vendor Response

This response is to confirm that you understand and accept the conditions of participation in the process, as outlined in the covering letter, that Alberta Education is employing to evaluate school based student records software. Please indicate with a check mark(√) those components listed below which are a part of your software and which you can demonstrate.

- ❑ **Demographics**
  - ❑ •fixed fields
  - ❑ •flexible user controlled fields
- ❑ **Attendance**
  - ❑ •daily and half day
  - ❑ •period and course
- ❑ **Marks and Progress Reporting**
  - ❑ •marks and credits
  - ❑ •interim marks
  - ❑ •verbiage reporting
- ❑ **Scheduling**
  - ❑ •master timetable creation
  - ❑ •class loading
  - ❑ •homeroom loading
- ❑ **Historical Information**
  - ❑ •course mark, attendance and credits
  - ❑ •standardized testing
  - ❑ •diploma or certificate information
- ❑ **Input and Output Capabilities**
  - ❑ •flexibile record definition
  - ❑ •ease of use
  - ❑ •change only capabilities
- ❑ **Other General Features**
  - ❑ •multi access
  - ❑ •report writer
  - ❑ •etc.

Please indicate the arranged day and time for the short demonstration as determined with your telephone call to The Educational Information Exchange.

Date:_____ EIE Contact Person:_____

Time:_____

Company Name:_____ Phone _____ Fax _____

Appendix 6

Vendors Participating in Short Software Demonstrations

Listed alphabetically by product name, the following vendors participated in the short software demonstrations:

Product: *Mac School*
Vendor: Chancery Software Ltd.
Address: 4th Floor, 1122 Mainland Street
Vancouver, British Columbia V6B 5L1
Contact: Barbara Vanjoff

Product: *POISE Student Information System*
Vendor: Campus America
Address: Suite 205, 900 Hill Avenue
Knoxville, Tennessee 37915
Contact: Larry Howell

Product: *School Administration System*
Vendor: Maplewood Computing Ltd.
Address: The Old School, 890 Nairn Road
Hyde Park, Ontario N0M 1Z0
Contact: Richard Routhier

Product: *The School Administrator Series*
Vendor: Trevlac Computer Services Ltd.
Address: 209 - 101 Cherryhill Blvd.
London, Ontario N6H 4S4
Contact: Peter Calvert

Product: *The School Office*
Vendor: SoftWeb Applications
Address: RR #1
Bowden, Alberta T0M 0K0
Contact: Horst Weber

Product: *School Records Program*
Vendor: School Records Programs
Address: Box 185
Raymond, Alberta T0K 2S0
Contact: Joseph Stevenson

Product: *The School System and The Elementary School System*
Vendor: CBT/Columbia Computing Services
Address: 1338 West Broadway, Suite 200
Vancouver, British Columbia V6Z 1H2
Contact: Dale Haubrich

Product:	*School-Works*
Vendor:	Decision Systems Inc.
Address:	200 Route 17 Mahwah, New Jersey 07430
Contact:	Norman Wazaney

Product:	*Student Information Records System (S.I.R.S.)*
Vendor:	Management Information Group
Address:	Regency Business Park, 205 A Carnegie Drive St. Albert, Alberta T8N 5A9
Contact:	Norm Edelmann

Product:	*Student Information System (SIS)*
Vendor:	Strathcona County
Address:	2001 Sherwood Drive Sherwood Park, Alberta T8A 3W7
Contact:	Ralph Schienbein

Product:	*Student Records System (SRS)*
Vendor:	Calgary Board of Education
Address:	515 MacLeod Trial SE Calgary, Alberta T2G 2L9
Contact:	Ron Powell

Product:	*Total Student*
Vendor:	Total Computers Ltd.
Address:	521 - 5th Street South Lethbridge, Alberta T1J 2B9
Contact:	Ed Leavitt

Product:	*Turbo School*
Vendor:	TCS Developments Inc.
Address:	2188 Newport Avenue Vancouver, British Columbia V5P 2H8
Contact:	Jack Wong

Product:	*Windsor School Administration System*
Vendor:	Harts Systems Ltd.
Address:	320 - 1035 West 13 Avenue Vancouver, British Columbia V6H 1N1
Contact:	David Allen

Appendix 7

Requirements for Half-Day Demonstrations

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

April 17, 1990

«name»
«position»
«company»
«address»
«city, province/state»
«code»

Dear «salutation»:

As a result of the presentation you made at the vendor short demonstrations during April 3 to April 6, the working committee extends an invitation to participate in the long demonstrations to be held the week of April 23-27. As discussed in our recent telephone conversation, the time and place for your long demonstration will be:

Tuesday, April 24th, 1:30 pm to 4:15 pm
Information Services Training Room, 2nd Floor
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta

If your setup time will be greater than 30 minutes, please contact me so that appropriate arrangements may be made.

The long demonstration will run for 2 3/4 hours on a vendor supplied computer running the current (as of April 23) production software. If non-production software as of April 23 is used, then the vendor will be disqualified from further evaluation. The data base used will contain at least 500 students with demographic information, student timetables, half year attendance, and marks for at least two report periods.

The committee needs to be clearly made aware of the hardware and operating system software used for the demonstration. An effort must be made by the vendor to ensure that the computer configuration used for this demonstration is equivalent to that found at a typical school site. The committee also requires that your presentation focus on the following areas:

«specific area 1»
«specific area 2»
«specific area 3»
«specific area 4»

As part of your demonstration, you will be given information to register a student into your system, asked to enter some period and daily attendance by class and home room, and to register a student in classes effective the day of your presentation. This registration process could make use of both manual update and some form of on-line scheduling.

The last part of your demonstration should address your software migration, with respect to hardware and operating system software. Also, you should cover the content of your near future major enhancements and releases.

Enclosed with this letter is a document asking questions about your software, your company, and hardware requirements. This document is to be completed and returned at the time of the long demonstration.

The working committee also should be provided with a list of all your current Alberta sites, and be given permission to visit, observe and discuss your software at any licensed site.

Should you have any questions or concerns, then please do not hesitate to contact me.

Yours truly,

Blair West
Project Officer
Educational Information Exchange
427-9655

Appendix 8

Functional Criteria

Part A: Broad Functional Criteria

Seven broad areas of functionality were identified by working committee members as being necessary for student records software to be effective in the school environment. Detailed criteria were developed for each area and are listed in Part B of this appendix.

Numerical weights assigned to the broad functional areas reflect the measure of their relative importance as delineated by working committee members. The percentage of the total weight (100%) that was assigned to each functional area follows:

Demographic Data	*13%*
School Setup and Scheduling	*17%*
Student Attendance	*11%*
Progress Reporting and History	*16%*
Data Export/Import	*16%*
Ad Hoc Report Writer	*14%*
User Interface and System Operation	*13%*

Advice:

Those schools or school jurisdictions considering the purchase and implementation of one of the microcomputer based products recommended as a result of the evaluation process undertaken by the working committee should carefully examine the functional areas and the associated detailed criteria used in this initiative to determine product suitability from their own unique perspective.

Part B: Broad Functional Criteria with Corresponding Detailed Criteria

The following criteria are an excerpt from the Invitation to Offer which was sent to vendors in the fourth stage of the school based student records software evaluation initiative.

The detailed criteria within each broad area were refined in a sequence of working committee meetings that were held throughout the evaluation process. In developing the criteria, working committee members referred to information collected from similar objectives undertaken by Alberta Education, the Ontario Ministry of Education, the Manitoba Ministry of Education, and the Government of the Northwest Territories. Information was also collected from discussions with staff from jurisdictions with established automated student records systems, a review of industry standards and trends, the experiences of working committee members and their knowledge of software currently in operation, and a literature review.

Demographic Data

Demographic information must be stored in a database with field descriptions and field lengths at least equal to those listed below. A reasonable amount of table validation (i.e., capability to check entered data against a predefined table to ensure no invalid data is stored in the system) must be present to minimize data inaccuracies. Since the information captured and stored by schools and school jurisdictions is diverse, procedures to define some parts of the database must be flexible and under the control of the user. The basic demographic data collected and stored must meet the needs of schools, school jurisdictions, and Alberta Education.

Basic Demographic Information

◆ Jurisdiction's student identification number	(15 alphanumeric characters)
◆ Alberta Education identification number	(9 numeric characters)
◆ Surname	(25 alphanumeric characters)
◆ Given names	(25 alphanumeric characters)
◆ Sex	
◆ Date of birth	(6 numeric characters)
◆ Type of identification (e.g., Birth Certificate)	
◆ Address	(82 alphanumeric characters)
◆ Postal code	(6 alphanumeric characters)
◆ Telephone number	
◆ Permanent mailing address	(145 alphanumeric characters)
◆ First parent/guardian name	
◆ First parent/guardian address	
◆ First parent/guardian telephone number	
◆ Second parent/guardian name	
◆ Second parent/guardian address	
◆ Second parent/guardian telephone number	
◆ Custody contact code	
◆ Student protection code	(1 alphanumeric character)
◆ Citizenship	(1 numeric character)
◆ Francophone eligibility	(1 alphanumeric character)
◆ Status of registration (e.g., continuous, evening, etc.)	(3 alphanumeric characters)
◆ Grade	(2 alphanumeric characters)
◆ Registration type (e.g., day, evening, summer, etc.)	(1 alphanumeric character)
◆ Resident board	(4 numeric characters)
◆ Visa expiration date	(6 numeric characters)
◆ Enrolment type (e.g., Treaty, DND)	(3 x 3 numeric characters)
◆ Exceptional student	(2 x 2 alphanumeric characters)

- Program (3 x 3 numeric characters)
- Additional predefined demographic fields
- User defined demographic fields with the option for table validation

Entry/Exit Data

To provide a comprehensive description of student movement, the package should maintain a cumulative record of the following data each time a student enrolls in or exits from a school.

- Entry date (6 numeric characters)
- Entry from (location)
- Exit date (6 numeric characters)
- Exit description (5 alphanumeric characters)

Predefined Demographic Reports

In each of the predefined demographic reports the user must be able to specify the portion of the database to be used to generate the report, and must be able to define the manner in which the data for the report is to be reported. There should be several sort options and the user should have some control over the format of the report. A powerful ad hoc report writer is required in addition to the predefined reports. (Requirements and guidelines for ad hoc reports are outlined later in this section.)

- Homeroom lists
- Student address labels
- Parent/guardian mailing address labels
- Student name list with selected demographic data
- Student demographic verification form
- Age Grade Sex Report
- Summary of Enrolment ("XYZ") Report

School Setup and Scheduling

While the requirements for student scheduling vary among schools, some of the more common configurations include:

- scheduling 8 or more courses per student into a scattered timetable with combinations of semestered and non semestered classes having the same course code—common in the senior high school
- students belonging to a common group for core subjects and being placed in different groups for option courses with a varying numbers of periods required per course in each cycle—common in the junior high school
- grouping of students for all subjects and activities—common in the elementary school.

Some schools will have combinations of these or other configurations. The software needs to accommodate scheduling, reporting, and attendance requirements for any combination of scheduling configurations within the same school. Student scheduling in Alberta schools is typically accomplished in one of three ways:

- *Automated Master Timetable Creation and Student Loading*

  The master timetable for the school is created on a computer and is based on user defined resources such as teachers, courses, student counts, time matrix, and other constraints. This procedure is followed by the automatic loading of students into the master timetable. The Master Schedule Builder should handle a variety of scheduling units such as full year, semester, trimester, quartermester, or combinations of these units.

- *Automated Student Loading*

  Student course requests are loaded into classes by the computer based on a master timetable which has been created either manually, semiautomatically, or automatically. The software allows this loading to be performed according to user defined guidelines or conditions.

- *Manual Student Loading*

  The master timetable is created manually, entered into the computer, and students are manually entered or loaded into classes. The relationships between teachers, students, homerooms, courses, and grades are maintained by the software.

Instructor Information

The database should record at least the following instructor information in order to operate the scheduling, attendance, and student progress reporting modules of the software.

- Name
- Home room
- Gender
- Address
- Telephone number
- Social insurance number
- Employee number
- Certificate number
- Courses taught
- User defined instructor fields (minimum of 6 with variable length, user defined format, and optional table validation)

Facilities Information

The database should record at least the following facilities information in order to operate the scheduling module of the software.

- Room code
- Room name
- Room capacity
- User defined facilities fields (minimum of 6 with variable length, user defined format, and optional table validation)

Course Information

A central course file is required for scheduling, period or class attendance, and student progress reporting. This file would be used to validate student courses entered into the database and to check prerequisites and corequisites.

- Departmental course code
- Local course code
- Course description including number
- Course duration
- Credit value (2 numeric characters)
- Language of instruction
- Language of exam
- Course weight
- Course group or course type table

- Prerequisites and corequisites (minimum of 4, each must handle "and/or" relationships)
- User defined course fields (minimum of 6 with variable length, user defined format, and optional table validation)

Course Requests

- Manual entry
- Automated entry by scanner, barcode, or some other means
- Mass course request assignment or reassignment
- Student can specify preferred courses
- Student can specify section and/or teacher and/or semester
- Student can specify alternate course selection

Edit and Validation of Course Requests

- Check prerequisites and corequisites
- Override prerequisites

Predefined PreScheduling Reports

The user should be able to specify the portion of the database to be used in the generation of predefined prescheduling reports, and sort these reports in a variety of ways. The user should also have control over the report format. A powerful ad hoc report writer should be available in addition to predefined reports. (Requirements and guidelines for ad hoc reports are outlined later in this section.)

- Course tally
- Potential conflict report
- Student course request list
- Student request load
- Student request verification
- Students missing compulsory courses
- Duplicate course request list (if required)
- Prerequisite violations list

Master Schedule Builder

- Automatically build school timetable board
- Handle mix of scheduling units within one semester (i.e., different number of classes per day and days in a rotation)
- Semiautomatic/Interactive builder
- User defined timetable rotation/scattering
- User defined number of periods and days in a cycle

- Specify exclusive male/female class sections
- Maintain future and current master timetables
- Schedule more than one teacher and/or room per class

Class Loading Process

- User defined student loading sequence
- Unloading of missing students and/or withdrawals
- Overload class capacity
- Simulation run capability
- Loading of small groups and/or individuals
- Capability to individual lock student schedules
- Semester balancing of courses
- Blocking of courses (i.e., treat groups of courses as one)
- Section balancing
- Male/female class balancing
- Keep student scheduler open after school start
- Handle mix of semester and full year classes with same course code

Predefined Post Scheduling Reports

The user should be able to specify the portion of the database to be used in the generation of these predefined post scheduling reports and sort these reports in a variety of ways. The user should also have control over the report format. A powerful ad hoc report writer should be available in addition to the predefined reports. (Requirements and guidelines for ad hoc reports are outlined later in this section.)

- Student timetables printed in list format
- Student timetable printed in grid format
- Instructor timetables printed in list format
- Instructor timetables printed in grid format
- Room timetables printed in list format
- Room timetables printed in grid format
- Master schedule with class enrolments
- Class lists
- Students partially scheduled showing conflicts
- Unassigned time
- Present location (class and room) of student displayed on screen
- Present location (class and room) of teacher displayed on screen

Junior High Scheduling Assignments

- Homeroom grouping for core subjects
- Schedule in any combination and number of periods
- Automatic homeroom assignment

Multiple School Timetables

- Maintain more than one timetable for same year in the same database

Student Attendance

Student attendance is a repetitive process of collecting and recording information. The software should easily capture and efficiently store student data, and the data should be fully accessible for reporting. The software should also allow the user to define both operational and non-operational days at the half day level. An example of this situation is where the morning is defined as operational (student in attendance) and the afternoon as non-operational (student not in attendance, and not required to be in attendance) for a certain segment of the school population.

Student attendance in Alberta is typically arranged in one of three configurations:

- *Class Attendance:* Attendance data is captured, stored, and reported at the student/class level with an emphasis on class reporting rather than period reporting;
- *Daily Attendance:* Attendance data is captured, stored, and reported at the half day level, usually in an AM/PM arrangement
- *Special Attendance:* Attendance data accommodates part time or ECS students who may attend for half a school day or for two entire days per week. To handle these students, the user requires the option of defining a half day's absence as a full day's absence for reporting purposes.

Entry of Attendance Data

- Manual entry by class
- Manual entry by student
- Manual entry by homeroom
- Manual entry by special student group (e.g., grade/class/teacher)
- Automated entry by scanner, barcode, or some other means
- Multiple user defined absence types
- AM/PM attendance with the option for a single entry for all day absence

Storage of Attendance Data

- Daily (AM/PM)
- By period
- By subject
- Combinations of above within one school in a single database
- Maintain more than one school calendar in a single database

Predefined Attendance Reports/Inquiries

The user should be able to specify the portion of the database to be used in the generation of predefined attendance reports/inquiries and sort these reports in a variety of ways. The user should also have control over the report formats. In addition to the predefined reports, a powerful ad hoc report writer should be available. (Requirements and guidelines for ad hoc reports are outlined later in this section.)

- Individual student attendance profile of absences and reasons
- Detailed and/or summary homeroom attendance
- Automatically generate user defined attendance letters
- Automatic telephone dialer support
- Attendance analysis report by teacher/period/homeroom/course
- Attendance analysis report for user defined time periods
- Report by absence code
- Daily absences for entire school sorted by homeroom
- Daily list of students missing one or more classes

Student Progress Reporting and History

Student progress data must be stored for each subject and for each student. The amount and type of information stored and reported will vary among schools. High schools may require as many as 8 marks per course with user defined comments. Elementary schools may require an anecdotal form of reporting with a user defined reporting format. The software should support these extremes as well as the complete range of possibilities between these extremes.

Student Marks

- Manual mark entry for an individual student
- Manual mark entry by class/section
- Automated mark entry by scanner, barcode, or some other means
- Automated mark entry via computerized markbook
- Maintain concurrent numeric and letter mark scales
- User defined letter/numeric conversion
- Course comments (minimum of 2 per course)
- Course marks (minimum 4 per term plus final exam)
- Course final mark calculated with user defined weights
- Departmental exam final mark
- Blended final mark of departmental exam and school awarded mark
- Free form anecdotal reporting for elementary use

Student Exams

- Exam timetable builder manual
- Exam schedules

Predefined Student Progress Reports/Inquiries

The user should be able to specify the portion of the database to be used in the generation of predefined student progress reports/inquiries and sort these reports in a variety of ways. The user must also have control over the report format. A powerful ad hoc report writer should be available in addition to the predefined reports. (Requirements and guidelines for ad hoc reports are outlined later in this section.)

- Mark gathering form
- Teacher mark verification list by class
- Report cards
- Class and/or course average reporting
- Honors list with user defined criteria

- Potential failure lists
- Alberta Result Statements

Student History

The database should have the ability to store summary historical information. The user should be able to specify the information that is to be moved from the current database and stored in the historical section. This operation should then be performed automatically as the system is rolled over from one year to the next.

- Course final mark
- Course credits
- Course year
- Course term
- Course school
- Course absence total with option to not record
- Course type (e.g., regular, review, retroactive, etc.)
- Diploma and/or certificate awarded including date
- Graduation eligibility list with user defined criteria
- Hard copy of transcript
- Elementary school marks system (i.e., letter grades, anecdotal reporting, etc.)
- Archiving of summary attendance and marks on floppy diskettes or tape

Data Export/Import

The user should be able to select, format, and transfer data to other systems. The user requires full access to all of the data in the system, and must be able to easily develop and store both import and export specifications.

Export

- User defined export records definition with extraction of data from any field
- User specified position in record
- Truncate and/or expand any field to user specified length
- User specified fixed data to record
- User defined field and record delimiters
- Store record layout definition
- Select subset of database for extraction
- Export records changed since previous export
- Summary report on export data
- Detailed report on export data

Import

- Import any data element
- Translation and mapping fields
- Automatic integrity check (i.e., table validation, data characteristics, etc.)
- Edit reporting of rejected data

Ad Hoc Report Writer

It is impossible for any single software package to provide sufficient predefined reports to meet the changing needs of every school. Therefore, a fully featured ad hoc report writer should be available. This report writer should be simple enough to be used by non technical users and should allow users to have full access to all of the data contained in the system.

Parameters

- Report any combination of data elements
- Truncate and/or expand field to user specified length
- User controlled footer definition including variable data in footer
- User defined row and column placement
- Calculated fields
- Placement of fixed text and lines
- User specified paper size
- User specified page break
- User specified number of characters per inch
- User specified lines per inch
- User specified margin control
- Vendor supplied printer drivers
- User defined printer drivers
- Vary print characteristics within report (e.g., bold, condensed, underline, etc.)

Maintenance of Reports

- Store report definition
- Store report description
- Lock specific report definitions
- Report definition import and export

Selection and Printing of Reports

- Flexible selection criteria including Boolean operators
- Flexible sort criteria on multiple keys
- Select range of pages to print

Operation of Reports

The specifications included in this section hold for both predefined and ad hoc reports. Both of these types of reports should be flexible and convenient to the end user.

- Does not lock system
- View report to screen prior to printing
- Spool report requests
- Write report to hard disk
- Write report to floppy diskette

User Interface and System Operation

Student records software will be used by school personnel with varying degrees of expertise and experience. The software should therefore operate in a clear, consistent, and efficient fashion. Function key assignments should be identical in each module and on each screen.

User Interface

The software should insulate the user from the operating system. Execution errors should return the user to a menu rather than the operating system. The software should have cursor control keys or some input device to allow the user to maneuver within individual fields and between fields. On line help should be available during all stages of software operation. Product documentation should be complete, including an extensive index and glossary of terms.

- Written documentation
- Context sensitive help screens
- Table lookup on screen
- On-the-fly table editing
- Consistent screen appearance
- Consistent keystrokes for similar functions
- Move directly between screens
- Move between fields on a screen via cursor keys
- Data defaults
- Global update on select ranges of data
- User controlled security
- Access to full French character set
- Software and documentation available in French

System Utilities

Maintenance utilities are required to ensure the security of the data and to optimize the operation of the system. These utilities should be integrated into the software and insulate the user from the complexities of the operating system.

- Backup and restore data files
- Cleanup of open files, work files, etc.
- Diskette formatting from within package
- Database reorganization and/or optimization
- Automatic installation of updates

Appendix 9

Announcement of School Based Student Records Software Recommendation

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

March 22, 1991

School Based Student Records Software Announcement

The Educational Information Exchange (EIE), on behalf of the Working Committee for the Evaluation of School Based Student Records Packages, is pleased to announce the recommendation of the following software packages:

The School Administrator Series by **Trevlac Computer Services Ltd.**, with products:

- *The Elementary School Administrator*
- *The Secondary School Administrator*

The School System Series by **CTB/Columbia Computing Services**, with products:

- *The Elementary School System*
- *The School System*

Agreements on pricing for purchase, maintenance, and training have been negotiated with these two vendors on behalf of Alberta schools. A schedule has also been established for delivery of Alberta specific enhancements so that the software can better meet Alberta requirements. The enhancements will be phased in over time, and therefore schools that are planning to automate immediately using these packages will need to discuss the implications of these future enhancements with the vendor. Please note this software is recommended and not mandated for use in Alberta schools.

CTB/Columbia and Trevlac product summary documents are attached for your information. Copies of the recommendation and vendor literature are enclosed for distribution within your district. Additional copies are available upon request.

Background

The EIE was encouraged by school jurisdictions and the Alberta School Trustees' Association to evaluate and recommend commercial student records software packages. In response, the EIE initiated a cooperative project in March 1990 to identify and evaluate school based student records software which would best serve the functional needs of Alberta schools and the data requirements of Alberta Education.

A working committee representing seven school jurisdictions and Alberta Education was established. The school jurisdictions which participated were:

Camrose School District #1315
Fort McMurray Roman Catholic Separate School Division #32
Grande Prairie School District #2357
Lakeland Roman Catholic Separate School Division #150
Lethbridge Roman Catholic Separate School Division #9
Peace River School Division #10
Yellowhead School Division #12.

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Vendors throughout North America submitted their student records software packages for evaluation. The working committee then:

- established broad functional requirements for the software
- established detailed functional requirements
- organized two sets of controlled demonstrations with the most promising vendors
- conducted site visits in Alberta, Manitoba and Ontario
- reviewed vendor responses to a formal 'Invitation to Offer' (ITO)
- reviewed ITO validations completed by experienced users
- ranked the software against predefined acceptance criteria.

The working committee invested significant resources and gathered a substantial amount of information during this comprehensive, multi-staged process. As a result of this process, it was determined by the committee that CTB/Columbia and Trevlac best meet the established acceptance criteria and, therefore, are recommended for use in Alberta schools.

Available Publications

The following supplementary documents are available from our office upon request :

The *School Based Student Records Package Evaluation Report* provides more detailed information on the evaluation process, the functional criteria used, and the products evaluated.

The *Guide to Student Records Automation* provides suggestions and tips regarding school level student record automation issues such as planning, needs assessment, selection, implementation, and support.

For further information please contact me or Blair West at 427-9655.

Dan Magnan
Assistant Director
Information Services

Attachments (2)

TREVLAC COMPUTER SERVICES LIMITED

209-101 Cherryhill Boulevard
London, Ontario N6H 4S4

(519) 667-0830 FAX (519) 667-0835

March 8, 1991

To All Superintendents of Alberta School Districts:

Our company is very proud to have been recommended by Alberta Education's Working Committee to provide school administration software to schools in Alberta. This recommendation by the Working Committee comes after a very thorough analysis of the available products in North America. This success follows a similar success in Manitoba three years ago where our products were selected as the recommended ones for the schools in that province.

The acceptance of our products by the Working Committee reflects our attempt to maintain state-of-the-art products by listening to the needs of our clients. We are continually improving our programs and adapting them to the changing requirements of schools across Canada.

We offer the widest range of operating environments of any company in this business. Our products run under the MS-DOS Operating System for schools that have only a single-user requirement; we support Local Area Networks (LAN's) such as Novell and Lantastic under the MS-DOS Operating System for schools that require a multi-user environment; we support Xenix and Unix for PC-based multi-user environments. Recently, our product has been modified to run on the A/UX Operating System (Apple's Unix) for multi-user systems on Macintosh computers. No other company offers this range of Operating System support for all of their products.

Our basic products are ***The ELEMENTARY SCHOOL ADMINISTRATOR*** and ***The SECONDARY SCHOOL ADMINISTRATOR*** for maintaining all the necessary information on students in those types of schools. ***The Secondary Builder***, for building master timetables and exam timetables, is an "add-on" module which supports The Secondary School Administrator. This module, normally sold separately, is included in The Secondary School Administrator package for Alberta schools. Another "add-on" module, ***The Rotary Timetable Builder*** is used to create master timetables in upper elementary and junior high schools and is available to Alberta schools at an additional cost of $195.

Our products are designed to give the school or school district a tremendous amount of flexibility in the creation and maintenance of their student data. The basic premise behind the creation of our programs is that the computer is in a school to serve the needs of the administration; the computer should not dictate how the schools should operate.

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We would like to demonstrate our programs to the school districts in Alberta that are interested in acquiring school administration software. Our plan would be to provide demonstrations at some central sites in various parts of the province based on the response to this offer. The sessions would be a day in length and will take place during the week of April 8. For those who are anxious to "get going", followup conversations and/or meetings would determine who would like to purchase the software and we would then arrange installation and training sessions in late April. For those that are not currently in a position to purchase software, additional selling and training circuits will be developed over the coming months.

TREVLAC COMPUTER SERVICES LIMITED has made special pricing arrangements for schools in Alberta. Our pricing is based on a unique **per student** basis for the school administration software. This means that smaller schools can get the same full-featured program as larger schools and pay a lower amount which reflects their more limited budgets. The following is a table of prices for the "administrator" products:

Product	Price per Student	Min.	Max.	Yearly Maint.
The ELEMENTARY SCHOOL ADMINISTRATOR	2.00	$ 200	$ 600	$200
The SECONDARY SCHOOL ADMINISTRATOR (single-user)	5.00	1300	3200	500
(multi-user)	6.00	1800	4000	600

Yearly Maintenance charges are applicable after the first year. Trevlac also offers ***The Board/District Office Administrator*** version for accumulating the data on all students in a jurisdiction in one file - this product was not evaluated by the Working Committee. A complete product list and pricing can be obtained from Trevlac.

In closing, if your school district and/or schools are in the market for school administration software, please contact us by March 29th at 1-800-265-1653 (toll-free) so that we can include you and/or your staff in the demonstration circuit that we will arrange for the week of April 8.

Yours truly,

Peter J. Calvert
President

PJC:jg

CTB MACMILLAN/MCGRAW-HILL

1338 West Broadway, Suite 200
Vancouver, BC V6H 1H2
604-739-5700/Fax: 604-739-5727
Toll Free: 1-800-663-0544

THE ALBERTA SCHOOL ADMINISTRATION SOLUTION

CTB/Columbia Computing Services is pleased to announce its partnership with Alberta Education, and to offer you and your schools an affordable computer-based school administrative solution called THE SCHOOL SYSTEM for your secondary schools, and THE ELEMENTARY SCHOOL SYSTEM for your elementary schools. This total solution includes proven software, professional user training and ongoing, reliable customer support. With this solution, your schools will have an easy to use management tool that will provide you, your staff, and your community with up-to-date student information.

As a result of this partnership, enhancements to these products are currently underway at CTB/Columbia, to meet the specific needs of Alberta Schools. In addition, special pricing structures have been negotiated, in order to make this administrative software as accessible to you as possible.

THE COMPANY:

CTB/Columbia has over 20 years of experience in creating, implementing, and supporting administrative software for the educational sector. In particular, CTB/Columbia has extensive experience in the successful management of school and district implementations and has been a major player in the electronic transfer of school information between Alberta schools and Alberta Education. In addition, CTB/Columbia offers integrated solutions for school libraries and student testing.

CTB/Columbia's products are currently licensed to over 10,000 schools in Canada, the U.S. and 32 other countries. Of those, over 170 schools in Alberta are successfully using these products.

CTB/Columbia's solid financial stability and experience will provide the Alberta schools with a strong and reliable partner, a factor vital to the future success of your important school automation project.

THE PRODUCTS:

These school administration management solutions will provide your schools with quick and easy access to student information. This comprehensive information makes administrators more effective as they interact with students, teachers, parents, and other members of the education community.

Designed specifically for schools, THE SCHOOL SYSTEM and THE ELEMENTARY SCHOOL SYSTEM streamline the management of student records and, through on-line inquiries can produce timely, professionally designed reports. They consist of flexible modules that make up a complete, integrated school management system. The major modules are:

* **Student Records** - maintains demographic and other essential information on each student.
* **Student Scheduling** - assigns students to classes within the master timetable. This module is unique in that it will schedule students according to the degree of difficulty in their timetable.
* **Master Builder** - constructs a master timetable for the school based on teacher and room requirements.
* **Daily Attendance** - tracks daily attendance (once or twice per day) and produces a complete set of reports, and facilitates the viewing of key information, such as student attendance profiles, on the screen.
* **Period by Period Attendance** - tracks attendance on a period-by-period basis and produces a complete set of reports, and facilitates the viewing of key information, such as student attendance profiles, on the screen.
* **Grade Reporting** - records current and historical grades, and produces report cards and many other management reports.

- **Local Area Network** - provides the record locking functions that allow multiple users to access the system simultaneously on a network operating system.
- **Data Exchange Facility** - facilitates the transfer of student data electronically from schools to Alberta Education, their district office and/or a feeder school.

Together, these products form a totally integrated solution which incorporates the tools necessary for the smooth operation of your schools. The system is designed so that the user becomes quickly productive and can provide important information to you, your school's administrators, your district staff and Alberta Education.

HARDWARE:

These products will operate on the following hardware:

Any IBM Personal Computer or IBM compatible, with the following:
- minimum 80286 based CPU
- 640K main memory
- monochrome or color monitor
- 30 Mbytes hard disk
- floppy diskette
- printer
- MSDOS 3.1 or higher

Networking hardware under the Novell netware is also supported.

TRAINING:

CTB/Columbia ensures that your installation goes smoothly and efficiently by providing a comprehensive training program. This user training is provided by qualified trainers familiar with the needs of Alberta schools, and can be presented at your schools and district location, if desired.

The training sessions include instruction on the complete operation of the system and are supplemented by training class workbooks.

CUSTOMER SUPPORT/SOFTWARE MAINTENANCE:

In addition to the training, CTB/Columbia provides a complete software maintenance and customer support package that will provide your schools with services to guarantee the safety of your important investment. These services include:

- Software updates;
- A user support toll-free help-line, open 5 am to 5 pm PST;
- Membership in the National and Regional Users' Groups; and
- Subscription to CTB/Columbia's newsletter, the Bulletin Board.

In conclusion, we at CTB/Columbia are extremely pleased to be a member of the partnership with your district, your schools and Alberta Education. We are committed to ensuring that the implementation of these products in your district is a success for you and your staff.

Please call Michelle Olthof, your CTB/Columbia representative at our toll-free number, for special pricing and further information on these products and services.